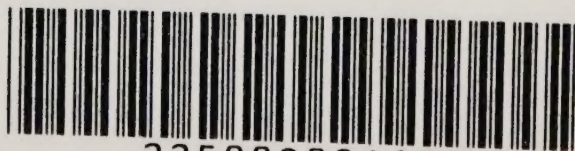


The *Dawn* of
WOMANHOOD



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FOREWORD

The idea of dawn is associated in the human mind with light, beauty, hope and happiness.

This is why we use the word "Dawn" in the title of this booklet. Our subject is the entry of the girl-child into womanhood, and this is like the dawn not only because it marks the beginning of a new stage in her life, but also because that beginning itself is a beautiful and glorious event.

Or rather, it ought to be, and could be beautiful and glorious. For it could and should lay the foundations of a healthy and happy womanhood. **That would be the normal state of affairs.**

Unfortunately, in some cases this ideal, the ideal of normality, is not realised. If a girl is fortunate, the transition with which we are going to deal, brings her nothing worse than a vague puzzlement, coupled with a sense of physical discomfort, which in the course of time becomes less and less acute, until finally it takes on the form of a recurring inconvenience. But if she is not so fortunate the transition may be accompanied by difficulties which may persist for most of her life, and may prove an ordeal rather than the beautiful and glorious event which, we repeat, it ought to be and could be.

The reason is **ignorance**. Ignorance not only on the part of the girl herself, which is only to be expected, but sometimes also on the part of her mother, who is unable to impart that vital knowledge, which only too often makes all the difference between an uncomfortable or even unhappy existence and a new awakening that is the birthright of every girl-child.

It is said that knowledge is power. That may be true. But it is certainly true, especially in this matter, that knowledge is happiness.

The object of this little book is to provide knowledge and banish the ignorance that for generations has darkened **The Dawn of Womanhood.**

To make certain that this outline and explanation will be understood by every reader, even a girl in her early 'teens, we present especially prepared illustrations which will convey striking visual impressions of the processes involved.

The following pages will also help the mother who may perhaps find it difficult to explain these matters in simple words to her daughter. The facts are perfectly natural, there is nothing secret or embarrassing about them.

But we must face the fact that embarrassment often does exist, and this essay is, therefore, written in such a manner that it **can safely be handed to girls, even in their early 'teens, to read for themselves.** It contains not one word which an older woman, such as a mother or a schoolmistress, might not say to a young girl.



YOU

How You Came into Being

You are a young girl just as your mother used to be, and as her mother was before her.

When they were your age they may or may not have known how they came into the world, but you probably know something about babies already, though perhaps not quite as much as this little book will teach you.

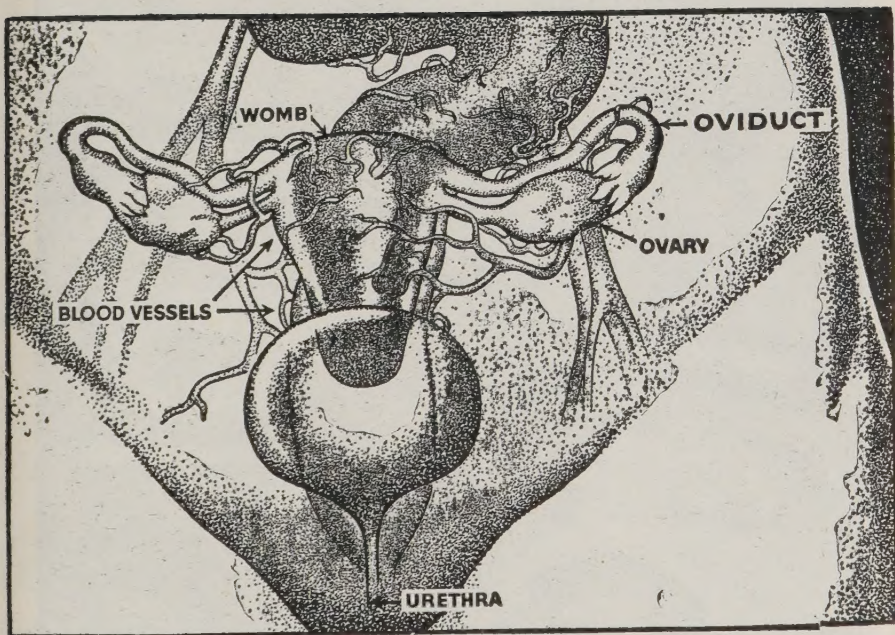
Perhaps you are aware that a baby grows inside its mother for about nine months until, fully developed as a human infant, it is born into the outside world.

Let us begin with the fact that you are YOU, say a girl aged 13 years, with dark or fair hair, eyes of blue or brown, a straight nose, tall or short and so on.

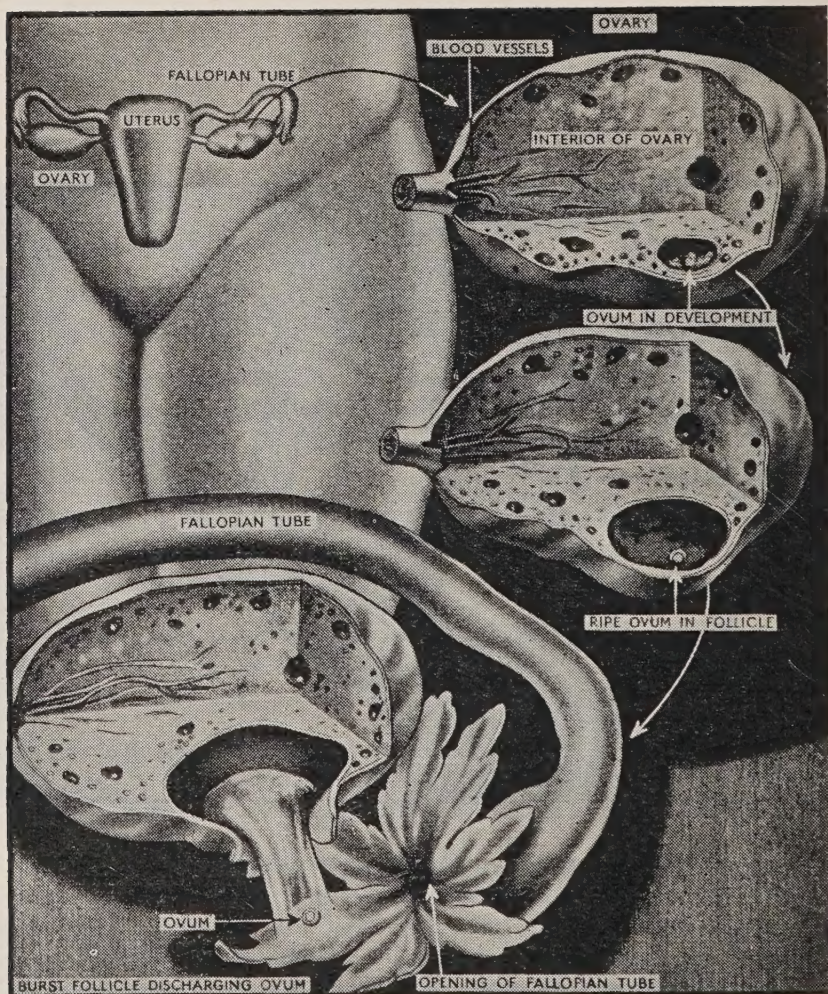
That you should be as you are was decided at a certain moment approximately nine months before you were born. Just what did you look like at that very important moment?

Well, for all your present prettiness, you looked like "nothing on earth." Indeed you were barely visible with the naked eye. Even if you had been out in the open, and not in your mother's body, only a person with very good eyesight could have detected you. Not as **you**, of course, but as a tiny bit of matter resembling a single grain of salt.

However, even that single "grain of salt" consisted of two different things: the creative power of your father, and the creative power of your mother.

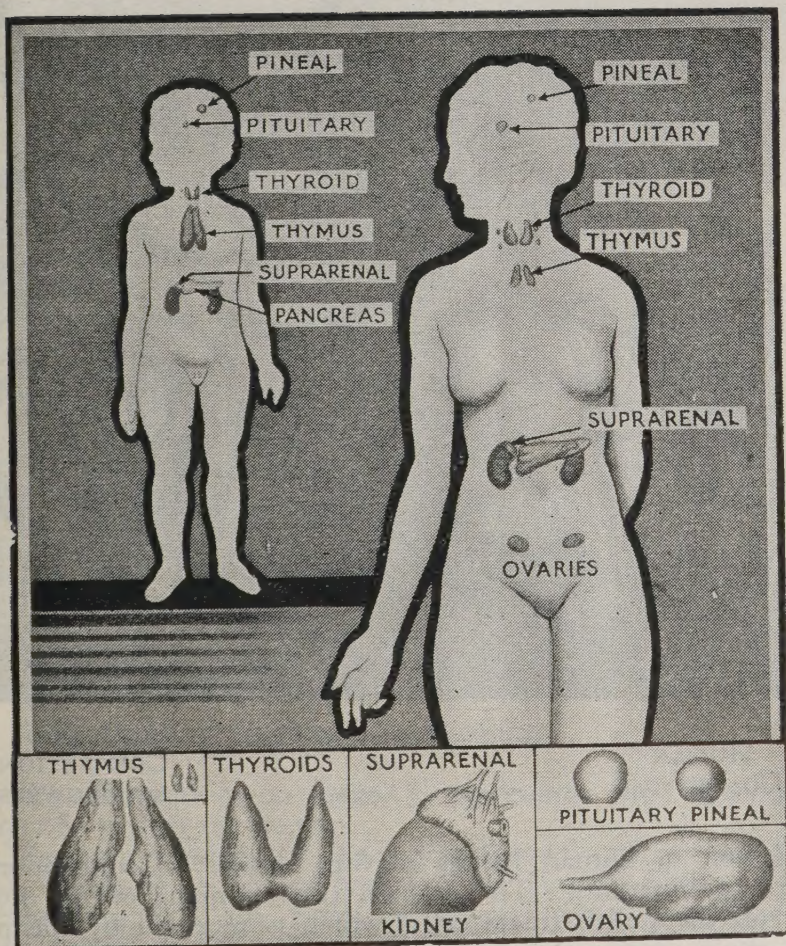


REPRODUCTIVE ORGANS OF A WOMAN

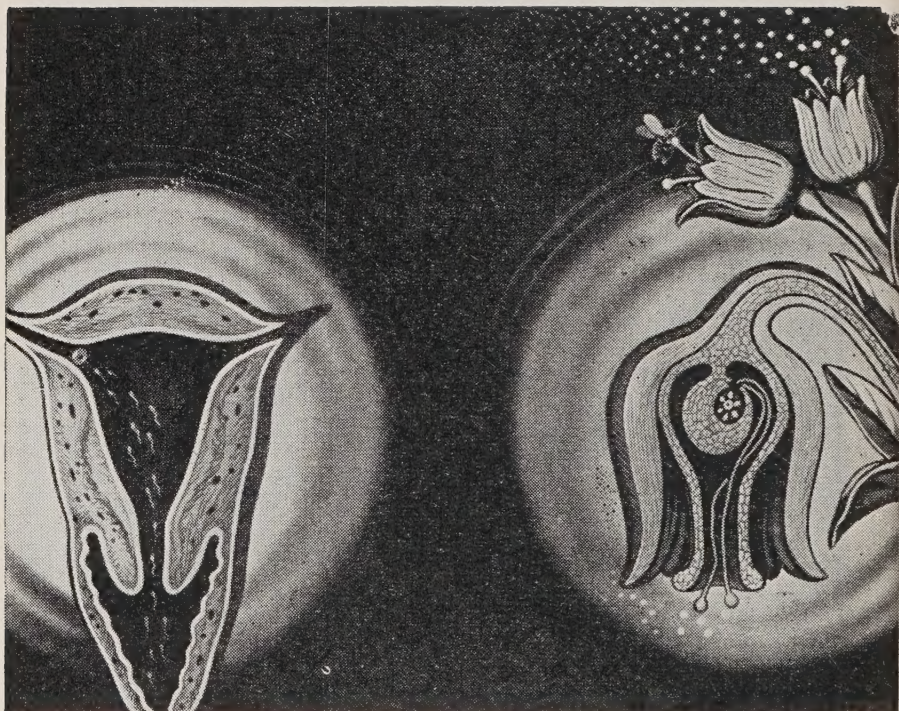


OVULATION

An ovum matures in each ovary every other month. The illustration shows the various stages of the ovum's development until it is shed by the follicle.



THE ENDOCRINE SYSTEM
 ("Glands of Destiny")



HUMAN
CONCEPTION

CONCEPTION
IN FLOWERS

Conception in human beings is very similar to conception in flowers (pollination). The stamen (male organ) of the flower sends off the pollen (male cells) which is received by the pistil (the female organ—the starred inner circle on the right of the picture). In the same way, in human beings, the male sperms move towards the female ovum (top left) to fertilise it. (See also illustrations on pages 25 and 26).

Love

As a preliminary to our explanations of the nature of the "grain of salt" which in the course of time has developed into the person you are to-day, we must say a word or two about love.

No doubt, you have already heard a great deal about being in love, though perhaps you have not experienced or been told what it really means.

We would say that a young man and a young woman are in love with each other if they feel not only that they want to be in each other's company as much as possible, but also that they want to give each other as much happiness as possible. You see the idea? If a girl wants to be in the company of a young man only because it gives **her** happiness, she is not truly in love with him. She is truly in love with him only if she feels that she also wants to give **him** happiness. The same applies to the young man. For true love is unselfish.

When a couple have reached this stage of mutual love, they usually marry. That is, they live together and on occasions have bodily contact with each other.

This is physical love, the full purpose of which is that children may be born to continue the human race.

Now let us see exactly how a baby comes into existence.

The Reproductive Organs of a Woman

The illustration on page 5 represents the reproductive organs of a grown-up woman.

The part which looks like a pear turned upside down is the womb. This is an empty bag with an internal lining, capable of expanding to many times its normal size. The two egg-shaped lumps at the end of the short arms sticking out near the top of the womb, are the ovaries. This word means "egg stores."

Each ovary contains about 30,000 immature eggs, called "ova," and each ovum requires two months to ripen. (Singular: ovum, plural: ova). However, as there are two

ovaries, a ripe ovum is produced each month, alternately by the right and left-hand ovary. The ovum is enclosed in a tiny bag, called a follicle, which lies near the surface of the ovary. As the ovum grows it causes the follicle to stretch, and finally to burst. At that moment, the egg bounces out of the follicle and off the surface of the ovary. (See illustration on page 6).

The two arms growing out of the top of the womb and ending in funnels shaped like carnations, are the oviducts (Fallopian tubes) which lead back into the womb. The "carnations" lie almost on top of the ovaries. You will see in a moment why.

At its narrowest end (see illustration p.8,) the womb has an opening, which fits into the vagina, the passage leading to the outer world, somewhat as a funnel fits into a bottle.

The whole apparatus is held in position by a number of "straps" of muscle, which are like very strong elastic.

Ovulation (Egg Production)

As we have already said, each month one of the ovaries ripens an ovum. When the ovum is quite ripe, it bursts from the ovary and bounces like a rubber ball into the "carnation" lying next to the ovary. This is called ovulation.

Though the length of the oviducts, *i.e.*, the distance from the mouth of the "carnation" to the inside of the womb, is only a few inches, the egg takes days to get there. The oviduct's lining has a delicate pile, like velvet, and this keeps moving somewhat like corn waving gently in the breeze. It is this movement which carries the egg forward, very slowly, towards its destination.

Before the ovum leaves the ovary, it is naturally nourished by the ovary. On its arrival in the womb, it is nourished by the lining of the womb, which is richly supplied with blood.

The very first thing the ovum does after leaving the ovary, is to defy the "pituitary" gland.

Now, what is the "pituitary"? To understand this, you

must know that the human body, just like a highly organised State, has a government. This government is composed of glands, sometimes called the "Glands of Destiny," because they play so great a part in the whole physical and mental being. We shall have more to say about these glands later, but for the present it is sufficient for you to know that the entire body with all its organs is governed by these glands, which give their "orders" by producing and pouring directly into the bloodstream certain "magic" substances called hormones. On page 7 you will see the illustration of the 8 "Glands of Destiny," the most important of which, the "Prime Minister," is called the "pituitary." The pituitary is no bigger than a small pea and is situated inside the bone which runs from the cheekbone to the ear, in the part next to the ear. The "Ovary," the other Gland of Destiny with which we are closely concerned, is also a member of the gland government.

Now, the pituitary, as "Prime Minister," issues its orders to other glands and to the rest of the body by means of one of the many hormones which it produces.

One hormone which the pituitary continually sends through the bloodstream to the womb instructs the womb to perform contractions, somewhat like a pair of bellows.

But the ovum does not like these movements. So when it arrives in the carnation-shaped funnel of the oviduct, it appoints a servant, a body-guard, to stop the movements. This servant takes up his post in the hole left vacant when the ovum departs. You may imagine it wearing a bright yellow uniform, and on account of its colour it is called the "yellow body."

The yellow body produces a hormone of its own, which counteracts the effects of the above-mentioned hormone of the pituitary. It is as if the yellow body were saying to the pituitary: "You may be 'Prime Minister,' but my mistress, the ovum, is more important than you; and now that she is on her way to the womb, she wants the womb to stay quiet." And so, although the "Prime Minister" goes on sending out the hormone which makes the womb perform those contractions, the womb, with the aid of the yellow body, defies the pituitary and remains in a non-active state. At the

same time, the yellow body also orders the lining of the womb to prepare for the arrival of the ovum by "upholstering" itself with cushions containing blood. (See later).

Conception

Procreation or reproduction in human beings is very similar to the process of fertilization in the animal and plant world. Study the illustrations on pages 8 and 25. The latter shows the pistil, the female organ of the marsh-mallow, with its ovary, which is remarkably like that of a woman, and whose contents are fertilized by the pollen.

During the bodily contact between man and woman, the male organ discharges into the female organ a small amount of fluid containing some hundreds of millions of living cells known as sperms, like the "pollen" of flowers. Each sperm resembles a tiny tadpole with a tail which enables it to wriggle along.

These sperms are the man's contribution to the creation of a new being; the woman's contribution, which is just as essential, is the tiny, barely visible ovum. If bodily contact takes place when an ovum is present in the oviduct, or sometimes in the womb, conception is likely to occur.

What happens in the case of human beings is this. As soon as the sperms are discharged in the female organ they start a race towards the ovum, being attracted to it. Of all the hundreds of millions of sperms, it is normally only a few of the most vigorous ones that reach the ovum. The strongest of these pierces the ovum and buries its head in it. (See illustration on page 26).

The fusion of the sperm with the ovum is called conception, the beginning of a new life.

The fertilized ovum then continues its journey along the oviduct into the womb, where it digs itself in in the "upholstery" of the lining. It is there that, during the course of the following nine months, it grows and develops into a baby.

Approximately half the sperms produce boys and the other half girls. If the ovum is pierced by a "boy" sperm, the baby is going to be male; and if it is pierced by a "girl" sperm it is going to be a female. The sex of the new being, therefore, is unalterably determined at the time of conception.

Twins

It sometimes happens that not one, but two or even more new beings are conceived at the same time. How does this occur?

It can occur in one of two ways. Either there are two eggs present in the oviduct simultaneously and both are fertilized; or one and the same egg is pierced at the same time by two of the sperms attacking it. In either case, the result is twins. (See illustration on page 27).

Triplets, "quads" and "quins" are conceived by the same process. But once conception has taken place, further developments proceed in each case in the same way as in the case of a single child.

The "Gland Government"

Now let us consider in more detail the gland government mentioned in the previous chapter. (See illustration on page 7).

As you already know, the pituitary is the "Prime Minister," the gland in charge of the organism as a whole. Though it weighs only about **1/28th of an ounce**, it produces at least sixteen different hormones, those magic messengers which go out to the various organs, telling them what the "Prime Minister" wishes them to do.

One of these hormones orders the child's body to grow. If you come from a tall family, your pituitary will probably order you to grow fairly tall. If you come from a short family, it will probably limit your size accordingly.

In either case, the "Prime Minister" is not allowed to make any serious mistakes, at least not often. For the "Minister of Child Welfare" has a big say in this matter during the early years of your life. This is the Thymus gland, located in your chest. Just after you are born, it produces quite large amounts of its special hormone. At that time there is a danger that your organism will be too obedient to the "Prime Minister" and you will grow too fast. So the Thymus keeps an eye on you, and when the "Prime Minister" sends out its hormone message, "Grow!" the Thymus, as "Minister of Child Welfare," also sends a message, "Yes, but not too fast!" The Thymus acts as a brake, and the growth of your body is kept steady.

As you grow older, the "Ministry of Child Welfare" gets smaller and smaller, until one day its "offices" are reduced to quite a moderate size. You will see in a moment at what point this happens and why.

Sometimes, of course, the Thymus may be an inefficient "Minister of Child Welfare," and may fail to deliver its warnings effectively, so that the pituitary has it all its own way and the body grows to gigantic proportions; fortunately, these cases are extremely rare.

The "Minister of Physical and Mental Vigour" is the thyroid gland. (The word thyroid means shield-like, the thyroid being shaped like a shield). It is located at the base of the throat and its task is to decide, under the supreme control of the "Prime Minister," whether you are to be a lively girl, full of fire and energy and always ready to do things, or a quiet girl who does not like too much activity and exertion.

Connected with the thyroid is a smaller gland called the parathyroid. This is the "Minister of Works and Buildings," the main function of which is to attend to the requirements of your bones. It extracts the calcium (lime) from the food you

eat and sends it by way of the blood to the bones and other parts of the organism where calcium is needed.

Then there are two small glands on the top of your kidneys. They are the suprarenal glands and may be called the "Ministry of Defence." When you are threatened with any kind of danger, the hormone of the suprarenals rushes into your blood to put you on the alert. It is this hormone, too, which gives you a temporary sense of strength when you are angry.

Your suprarenal glands may also make you into a "tom-boy"; a girl with masculine characteristics. They may, for example, cause you to grow something of a moustache, though fortunately, very few girls are afflicted in this way.

As important as any of the other glands, are your ovaries. The ovaries, too, act more or less under the control of the pituitary, yet it is no exaggeration to say that, for all its great power, the pituitary is after all only the servant of the ovaries. The ovaries may be said to represent **the people**, and the position is somewhat the same as in a Democracy, where the Prime Minister holds his high office by the will of the people and by virtue of his ability and willingness to carry out the wishes of the people and is, in fact, the people's servant.

It has been said that "The Ovary is the Woman," meaning that it is your ovaries which make you into a woman, and cause you to look and feel like a woman.

When you are 11 or 12 years old, your ovaries "wake up" and become active. It is as though they were saying to the other glands and the rest of the body: "We, the people, have important plans in connection with this girl. Those plans require that her female organs should grow and develop. We also require that she should have broader hips than a boy, a slim waist and full, rounded breasts with bunches of milk glands in them, etc.

This marks the beginning of a period of intense activity, such as would accompany a very thorough reorganisation of the government of a country.

In fact, that is just what happens here. The ovaries, the people, take charge and, with the aid of their hormones, issue instructions right and left.

The "Minister of Child Welfare," the thymus, is reduced to a small fraction of its former size because the girl is now growing up and the ovaries demand rapid growth and development. The female organs must grow large enough for their future functions, and so must the hips and breasts, and the office of the "Ministry of Child Welfare" has become superfluous.

The "Ministry of Fuel and Power" and the "Ministry of Defence" are instructed to change their activities because what is wanted for the girl-child now is not an over-energetic or tom-boyish existence, but calmness and a gentle disposition. One department of the "Ministry of Defence," the suprarenal glands, must see to it that the girl has plenty of soft hair on her head, but not on her face.

The parathyroid gland, the "Minister of Works," is reminded that it must assist in keeping the bones of the pelvis loose because a time will come when rigidity there might do harm.

The ovaries attend to all this and more. Meanwhile, you will already have realised that it is your ovaries that determine not only that you should become a real woman, but also to some extent what type and kind of woman you should be, and even what type and kind of man will attract you or will be attracted by you.

For one of the most important tasks of the ovaries is to give you that something which will cause boys to be interested in you, and cause you to be interested in boys.

In fact, as we have said, THE OVARY IS THE WOMAN.



CHAPTER II.

"THE DAWN OF WOMANHOOD"

The First Menstruation

At an age of usually between 11 - 14, a time comes when the ovaries say to themselves: "This girl is now fit and ready for womanhood and can begin her **development** towards motherhood in a few years' time."

So, for the first time, the ovaries produce an ovum. (See "Ovulation" on page 10). That is the decisive event.

What happens to and in connection with the ovum depends on whether it has been fertilized or not.

As we know, the ripe ovum bounces into the carnation-shaped funnel and starts its slow journey through the oviduct towards the womb. The yellow body in the ovary stops the movements of the womb, so that the lining of the womb can prepare in peace for the arrival of the ovum.

When a **fertilized** ovum arrives in the womb and begins to grow there, it needs a plentiful supply of food. This comes from the mother's blood and passes through the navel cord joining the lining of the womb to the developing baby. But if the ovum arrives in the womb **unfertilized** the blood is not needed for the nourishment of the ovum and later the baby, and it passes out of the body. **This flow is called menstruation.**

And as an ovum matures about once a month, so there is a flow of blood, unless the ovum has been **fertilized**, in which case menstruation ceases, because the blood in the lining of the womb is required for the nourishment of the new being.

In the case of an **unfertilized** ovum the menstruation is brought about by the resumed contraction of the muscles of the womb in the following way:—

Soon after an unfertilized ovum appears in the womb, a message is flashed back to the yellow body: "You made a mistake in ordering me to upholster my lining. This ovum is not fertilized, and you have put us to all the bother for nothing."

The yellow body waits for a whole fortnight (reckoned from the day of ovulation) hoping against hope that the message might prove to be incorrect. Then this faithful body-guard of the ovary realizes it is unwanted and withers away. This means, on the one hand, that the yellow body is no longer there to order the lining of the womb to go on with its preparations; and on the other, that there is nothing to stop the bellows-like contractions of the womb ordered by the pituitary.

The contractions are therefore resumed, with the result that the thin film covering the blood cushions in the lining is broken up and the blood flows out of the womb through the vagina, the passage leading to the outside world.

Menstruation, except during pregnancy, should appear every month until the woman is about 45 or 50. (The word menstruation comes from the Latin word "mensis," which means a month).

On the first few occasions, menstruation is puzzling to a young girl, even if she has been warned to expect it, unless she has also been told exactly what it means.

Well, what does it mean?

If you have read the preceding pages carefully, you will realize that the first menstruation is the same thing as when a bud blossoms into a flower; that it is the beginning of the early training of your body for motherhood.

Your New Life

Menstruation and the development of feminine physical characteristics, of course, are not the only signs of your entry into womanhood. There are a great many others.

You have gained a new kind of attractiveness. Though you yourself may not be aware of it, there is a new light in your eyes, a new expression on your face, a new charm in your bearing. Even if you were not shy before, you are likely to suffer from a little self-consciousness now. But this only adds to your attractiveness. At the same time, you are more conscious of your appearance and take greater care to be turned out nicely when you go out, though perhaps you may be misled for a while into using more make-up than is really elegant.

Mentally, you feel as if your eyes had suddenly been opened and you see the world for the first time. Your relations with your own family have undergone a great change. You are now for the first time experiencing something which your mother has been experiencing for years, and this brings you closer to her. You understand her better, for now you are no longer a child but another woman.

As to the outside world, you will now see boys and men in a different light, not as a girl-child, but as a woman. You will begin to have definite likes and dislikes as regards the boys of your acquaintance. If you like reading, books will assume a new interest for you. You may have read novels before, but now you will read them with a deeper interest and a better understanding and you will frequently imagine yourself in the heroine's place.

Altogether, you will find that you have entered into a new world, with a new understanding of everybody and everything, new interests and new ambitions. At first, all the new feelings, sensations and impressions may be confusing, but on the whole you will find your new life exciting and happy.

The Menstrual Cycle

The process that takes place between the beginning of one menstruation and the beginning of the next, is called the menstrual cycle (a "cycle" is a series of events which keep repeating themselves in the same order).

In the great majority of cases, the menstrual cycle occupies exactly 28 days. However, in some cases, which are still perfectly normal, the cycle may be anything from 24 to 32 days.

The time-table of the events of a 28-day cycle is as follows:

1. First to fifth day. On the first day of the cycle, the flow begins, usually at a slow rate, becoming more ample on the second day. It goes on for anything from three to five days.

2. Sixth to thirteenth day. When the flow has completely ceased, the lining of the womb, which was broken up to start the flow, begins to re-form. Within about 12 or 13 days from the commencement of the flow, the lining of the womb is whole again.

3. Fourteenth day. Approximately on the fourteenth day after the commencement of the flow ovulation takes place. That is to say, one of the ovaries discharges a ripe ovum into the carnation-shaped funnel of the oviduct. At the same time the pit left by the ovum is filled by the yellow body, which takes charge of the womb, as already described.

4. Fifteenth to approximately eighteenth day. The ovum's slow journey throught the oviduct from the ovary to the womb.

5. Nineteenth to twenty-seventh day. The lining of the womb becomes gradually congested with blood, while the yellow body remains at its post, waiting for the ovum to be fertilized, and keeping the womb quiet.

6. Twenty-eighth day. Approximately on the fourteenth day after ovulation, *i.e.*, on the 28th day after the start of the

previous menstruation, the contractions of the womb restart, the yellow body having withered. Through the contractions, the lining of the womb is broken up again and another menstruation, and another cycle begins.

So, briefly, the time-table is this: First day, commencement of the flow; fourth or fifth day, end of the flow; twelfth day, completion of the new lining of the womb; fourteenth day, ovulation; twenty-eighth day, new lining starts to be broken up through resumed movements of the womb; twenty-ninth day, a fresh flow begins, this being the **first day of the new cycle**.

While most women know **approximately** on what day to expect their next menstruation, this is not enough. Every girl and woman would be well advised to keep a **precise** calendar, carefully entering the commencing date of each menstruation.

In the case of young girls having their first menstrual cycles, this is particularly important, because it happens quite frequently that the cycle does not become regularized for months, and if a doctor is consulted, as he should be, if a menstruation is delayed for more than a week, it is all the better to assist him with reliable information.

Mode of Life and

Hygiene during Menstruation

It is scarcely necessary to emphasise that a young girl should at **all times** lead a regular and healthy life. The simple rules that must be observed are briefly as follows:—

Seek plenty of fresh air and exercise. Walking, cycling, swimming, tennis and other outdoor games should be a matter of normal and, if possible, daily practice and not occasional events.

In the matter of food, you must try to have a balanced diet, with plenty of green vegetables and preferably wholemeal

bread. Meals should be unhurried and taken at the right times; tea and coffee may be taken in moderation, but alcoholic beverages should be avoided altogether.

Lastly, avoid late hours as a sufficiency of sleep is of vital importance to physical well-being.

During menstruations the same general health rules apply, with slight modifications only. Violent exercise, of course, is inadvisable; this category includes swimming, horse-riding and strenuous tennis. But light exercise is not only harmless, but necessary to maintain health and vigour. Again, while a very hot or cold bath might produce unpleasant consequences, **a daily warm bath while the flow lasts** is beneficial, quite apart from the question of cleanliness. If no bath is obtainable, a daily wash of the external organs with warm water is absolutely indispensable.

Sanitary towels, which are worn to absorb blood flowing from the vagina, should be changed night and morning, and for the first two days, at least, once during the day as well.

If you know the date of your next menstruation, as you ought, and accordingly carry a pad (sanitary towel) in your bag, you will escape the embarrassment of not having one available at the right moment.

Generally speaking, **menstruation need not and should not make any considerable difference to your normal conduct or daily routine.**



CHAPTER III.

MENSTRUAL IRREGULARITIES

Menstruation is not a disease, but a normal process, that, under perfectly natural conditions is painless, causing no disturbances of any kind. Just before the first menstruation you may experience a strange physical excitement or you may feel exceptionally sensitive for a day or two, or perhaps you may merely feel more thirsty than usual. But all this passes with the commencement of the flow.

Thereafter, you may feel a little "strange" for a short while before a new menstruation, and that is all.

However, in some cases the menstruation does not proceed so smoothly and the girl or woman may suffer from one of several types of irregularities. Let us consider them briefly, one by one.

1. Missed Menstruation (Amenorrhoea)

If a young girl who has started to menstruate regularly misses a period completely, she must consult a doctor. Indeed, she ought to do so if her menstruation is more than a week late. She may be suffering from anæmia, for example, and the sooner this is remedied the better.

In the case of a married woman, the cessation of the periods may mean that she is pregnant, for, as you know, from the moment of conception the blood accumulated in the womb is required for the nourishment of the new being, and menstruation is not resumed until after the birth of the baby. But in the case of a young girl who has had no contact with a man, this cannot be the cause of missed menstruations, and a gap of one or two cycles may indicate some irregularity which should receive attention.

However, a girl or woman may miss a menstruation in consequence of some strong emotional experience, such as fright, intense excitement, or even intense joy. Some married women miss their periods when worried about an absent husband, as in time of war, or when engaged in heavy manual labour.

On the other hand, shock or any other violent emotion may start the menstruation earlier than the usual date.

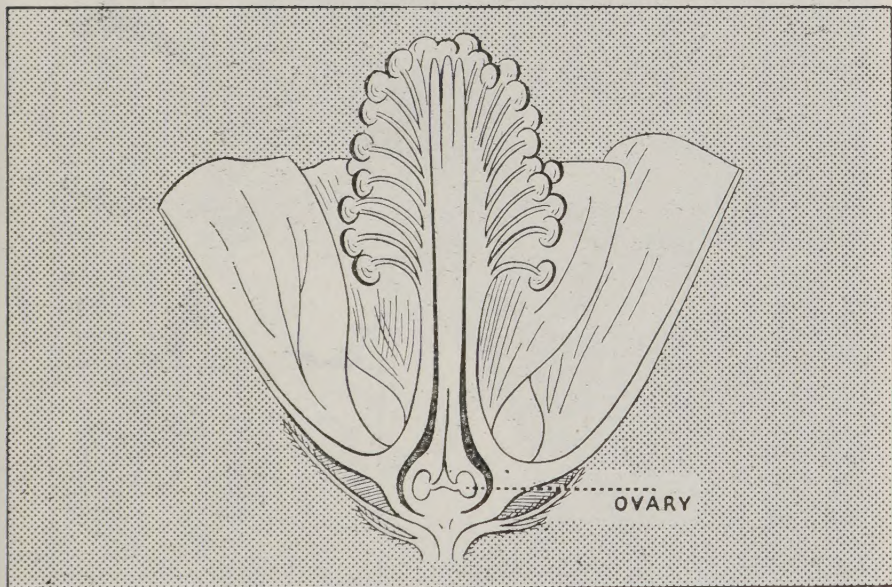
2. Painful Menstruation (Dysmenorrhoea)

There are two main types of menstrual pain: (a) *congestive*; and (b) *spastic*.

(a) *Congestive Dysmenorrhoea*. This is the less common, but more serious type of menstrual pain. The pain, which is severe, **begins about a week before the onset of menstruation and is relieved by the flow.** The condition is usually due to some abnormality of the womb or the oviducts, causing congestion or "overcrowding." A doctor should be consulted without delay.

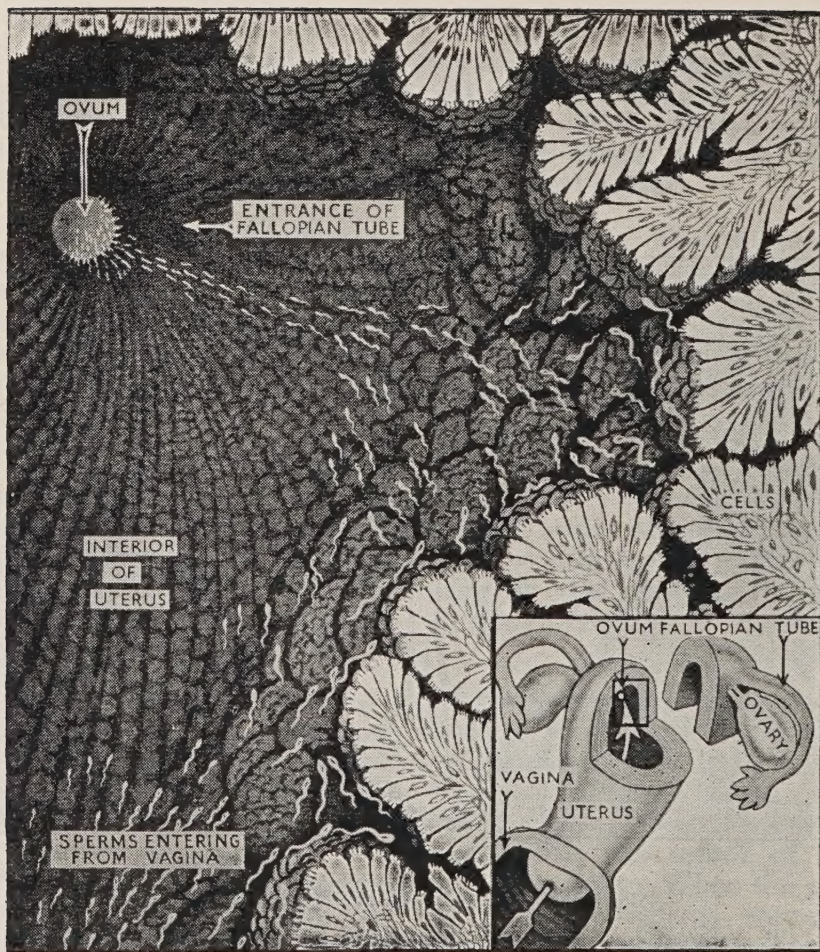
(b) *Spastic Dysmenorrhoea* (menstrual cramps). This is far more prevalent than congestive dysmenorrhoea, and is due to the painful contractions of the womb. **As a rule it is not of a serious nature.** The pain, however, may be severe and is usually cramp-like or it may take the form of an abdominal pain similar to neuralgia, **beginning with the onset of the flow and lasting a few hours or a whole day.** When the pain subsides, it leaves a feeling of heaviness and intense soreness. Associated with it may be: headaches, backache, nausea, nervous irritability and listlessness. Usually, no abnormality of the organs can be detected.

What may happen in the case of a young girl is this. From early childhood she may see that some adult woman in her environment, it may be her own mother, is "taken ill" from time to time, groaning occasionally and being generally "upset" for a day or so. In time, the child discovers the connection



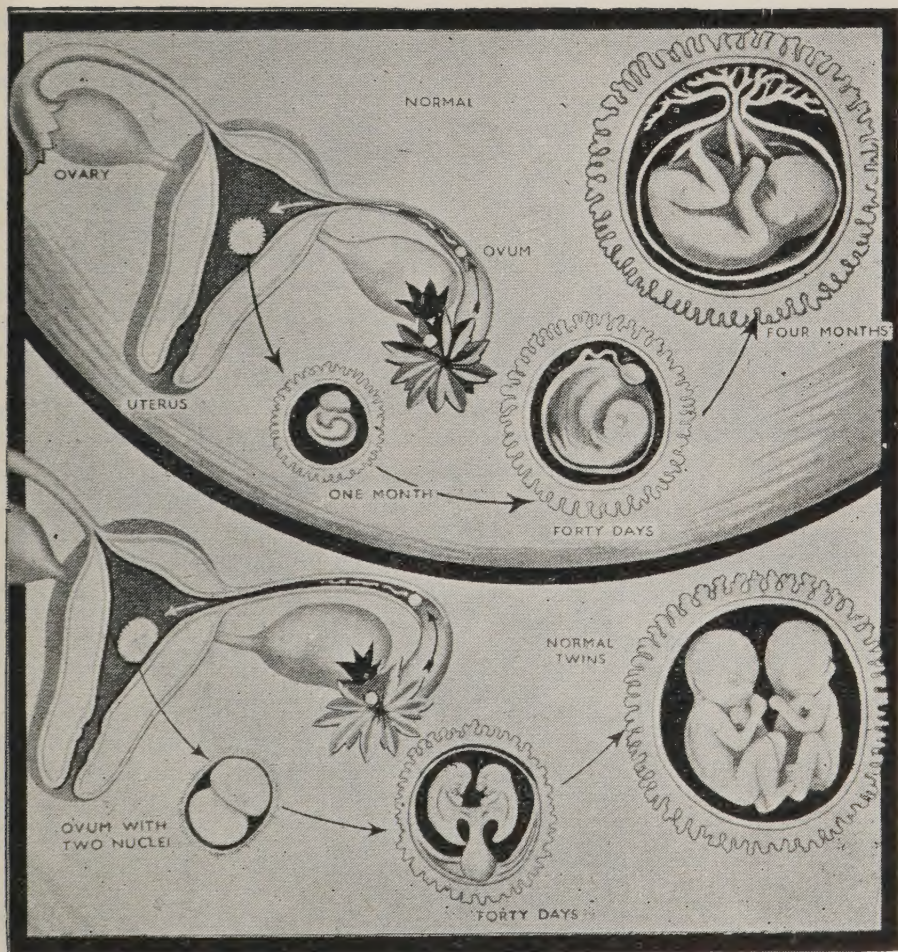
SECTION OF THE MARSH-MALLOW

Observe the similarity between the ovary of this plant
and that of a woman.



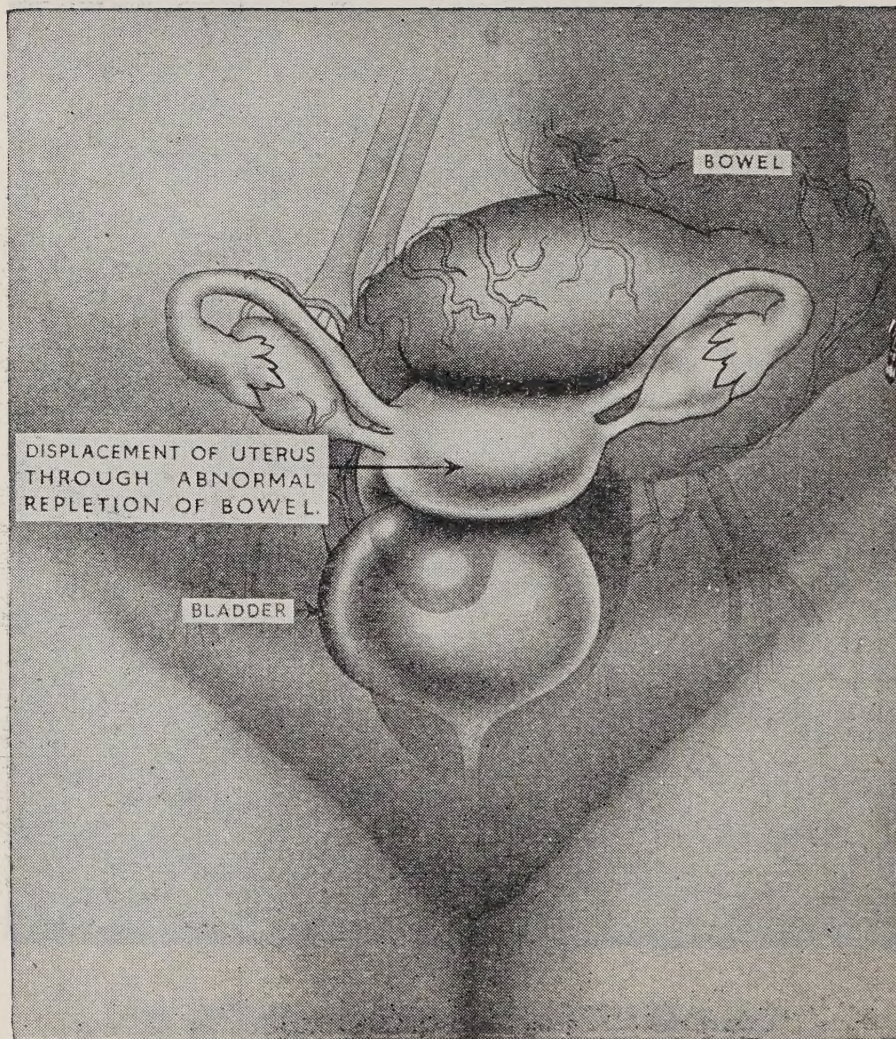
CONCEPTION

The ovum appears near the upper part of the uterus, in the opening of the oviduct. The sperms are attracted by the ovum, but only a few reach it after a perilous journey and normally only one penetrates it. (The illustration is greatly enlarged).



PREGNANCY

Upper part: Course of pregnancy with one child.
Lower part: Course of pregnancy with twins.



PAINFUL MENSTRUATION CAUSED BY CONSTIPATION
Enlarged bowel exerts pressure on the uterus, which tips forward, and causes menstrual cramps.

between these upsets and menstruation, so when she starts to menstruate, she too feels ill, suffering pain, though there may be no real cause for it.

If a doctor is consulted, as he should be, he often succeeds in relieving the complaint by means of a simple explanation of its true origin.

If no doctor is consulted there is a danger that the girl may use this pain as an excuse whenever she is afraid of, or wishes to escape from, some important task. For example, she may want to shirk responsibility in her employment or she may be doubtful as to the result of an examination at school or college. Instead of confessing it to herself and "facing up to it," she will take refuge in her menstrual pains, then, having missed her opportunity she will be sorry for herself. It is easy to see how this type of "running away" may spoil a girl's whole life.

Unhappiness at home or at work, separation from a loved one, unhappiness in marriage, all these things might bring about painful menstruation, the intensity of the pain varying according to the girl's state of mind at the time.

Cramp-like menstrual pains tend to cease with marriage, but only if the marriage is happy. On the other hand, an unhappy marriage may lead to menstrual pains even where previously the periods were painless. Childbearing often eliminates menstrual pains.

Menstrual Pains of Other Origin

Something like congestive pains may be caused by "overcrowding" due not to any abnormality of the organs, but to **constipation**. The illustration on page 28 shows how this happens. The full bowel presses between the oviducts against the top of the womb, tilting it forward. The womb has less space in which to perform its contractions, hence the pains.

This is a striking demonstration of the **evil of constipation**, which women and girls ought always to avoid.

Painful menstruation may further be caused by an inflamed womb or by the extreme narrowness of the neck of the womb, that is, the end which fits into the vagina.

Repeated **failure to relieve the bladder** by passing water, as from shyness in company, may also affect the normal, painless process of menstruation.

There are many other causes of menstrual pains, and while for the holding of water and constipation the remedy is simple, in all other cases a doctor should be consulted.

A Final Word of Advice

In the pages foregoing you have read about the symptoms commonly associated with dysmenorrhoea. Many of them may be applicable to your own case.

You must also remember, however, that to-day a woman should be able to follow her normal routine of life without very much pain or discomfort and without monthly "breaks," especially if the trouble is of the spastic type.

In the first instance the advice on exercise, diet and hygiene given in the preceding pages should be followed and if the discomfort persists a doctor should be consulted, for he alone is in a position to prescribe the necessary treatment.



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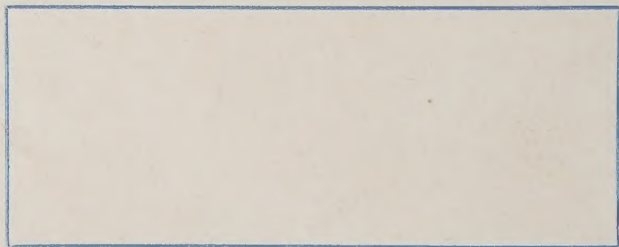
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Published by
MENOVO, LTD.
and issued by
CLINICAL PRODUCTS, LTD.
RICHMOND, SURREY, ENGLAND



TRADE MARK

TWENTY-THIRD
EDITION



Printed in England